

WHAT IS CLAIMED IS:

1. A semiconductor device, comprising:
  - a semiconductor substrate including an integrated circuit and an electrode;
  - a resin layer provided on a side of the semiconductor substrate where the electrode is formed; and
  - a wiring layer formed on an area reaching from the electrode to a top of the resin layer,
  - wherein the electrode has a first rim part facing a periphery of the semiconductor substrate and a second rim part facing a center region of the semiconductor substrate, and
  - wherein the resin layer is formed so as to overlap the second rim part, leaving out an area from the periphery of the semiconductor substrate to the first rim part of the electrode.
2. The semiconductor device according to claim 1, wherein a passivation film having an opening which exposes a part of the electrode is formed on the side of the semiconductor substrate where the electrode is formed, and the resin layer is formed on the passivation film.
3. The semiconductor device according to claim 2, wherein the resin layer is formed leaving out the exposed part by the opening of the electrode.
4. The semiconductor device according to claim 2, wherein a center of the opening is positioned so as to deviate from a center of the electrode towards the periphery of the semiconductor substrate.



5. A circuit board, where the semiconductor device according to claim 1 is mounted.

6. An electronic equipment, having the semiconductor device according to claim 1.

7. A method for manufacturing a semiconductor device, comprising:

forming a resin layer on a side of a semiconductor substrate having an electrode and an integrated circuit where the electrode is formed;

forming a wiring layer on an area reaching from the electrode to a top of the resin layer;

placing a first rim part of the electrode to face a periphery of the semiconductor substrate and placing a second rim part of the electrode to face a center region of the semiconductor substrate; and

forming the resin layer so as to overlap the second rim part, leaving out an area from the periphery of the semiconductor substrate to the first rim part of the electrode.

8. The method for manufacturing a semiconductor device according to claim 7, further comprising:

forming a passivation film having an opening which exposes a part of the electrode on the side of the semiconductor substrate where the electrode is formed; and

forming the resin layer on the passivation film.

9. The method for manufacturing a semiconductor device according to claim 8, further comprising forming the resin layer leaving out the exposed part by the opening of the electrode.



10. The method for manufacturing a semiconductor device according to claim 8, further comprising positioning a center of the opening so as to deviate from a center of the electrode towards the periphery of the semiconductor substrate.

11. A semiconductor device, comprising:  
means for accommodating an integrated circuit and an electrode;  
a resin layer provided on a side of the means for accommodating where the electrode is formed; and  
a wiring layer formed on an area reaching from the electrode to a top of the resin layer,  
wherein the electrode has a first rim part facing a periphery of the means for accommodating and a second rim part facing a center region of the means for accommodating, and  
wherein the resin layer is formed so as to overlap the second rim part, leaving out an area from the periphery of the means for accommodating to the first rim part of the electrode.

12. The semiconductor device according to claim 1, further comprising a plurality of external terminals electrically connected to the wiring layer.

13. The semiconductor device according to claim 11, further comprising a plurality of external terminals electrically connected to the wiring layer.

14. The method for manufacturing a semiconductor device according to claim 7, further comprising electrically connecting a plurality of external terminals to the wiring layer.



15. The semiconductor device according to claim 1, further comprising a resist layer covering a part of the wiring layer.

16. The semiconductor device according to claim 11, further comprising a resist layer covering a part of the wiring layer.

17. The method for manufacturing a semiconductor device according to claim 7, further comprising providing a resist layer to cover a part of the wiring layer.

18. The semiconductor device according to claim 15, further comprising a coat layer formed on the resist layer.

19. The semiconductor device according to claim 16, further comprising a coat layer formed on the resist layer.

20. The method for manufacturing a semiconductor device according to claim 17, further comprising forming a coat layer on the resist layer.